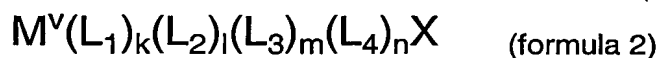


CLAIMS

1. A process for the preparation of a metal-organic compound, comprising at least one imine ligand, characterized in that an imine ligand according to formula 1, or the HA adduct thereof, wherein HA represents an acid, of which H represents its proton and A its conjugate base, is contacted with a metal-organic reagent of formula 2 in the presence of at least 1, respectively 2 equivalents of an inorganic or metal-organic base, wherein



wherein Y is selected from a substituted carbon, nitrogen or phosphorous atom and R represents a proton, a protic or an aprotic substituent, and:



wherein:

M represents a group 4 or group 5 metal ion

V represents the valency of the metal ion, being 3, 4 or 5

L_1 , L_2 , L_3 , and L_4 represent ligands on M and may be equal or different

X represents a group 17 halogen atom

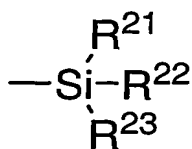
$k, l, m, n = 0, 1, 2, 3, 4$ with $k+l+m+n+1=V$

2. A process according to claim 1 wherein R represents a hydrogen atom and wherein Y is selected from the group consisting of:
i) a phosphorus substituent defined by the formula:



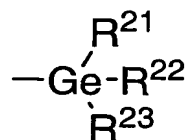
- wherein each R^j , with $j = 1-3$ is independently selected from the group consisting of a hydrogen atom, a halogen atom, a C_{1-8} alkoxy radical, a C_{6-10} aryl or aryloxy radical, an amido radical, or a C_{1-20} hydrocarbyl radical unsubstituted or substituted by a halogen atom, a C_{1-8} alkoxy radical, a C_{6-10}

aryl or aryloxy radical, an amido radical, a silyl radical of the formula:



(formula 4)

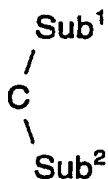
5 or a germanyl radical of the formula:



(formula 5)

10 wherein R^{2j} is independently selected from the group consisting of hydrogen, a C₁₋₈ alkyl or alkoxy radical, C₆₋₁₀ aryl or aryloxy radicals, each substituent R^{1j} or R^{2j} may be linked with another R¹ or R² to form a ring system,

ii) a substituent defined by formula 6:



(formula 6)

15 wherein each of Sub¹ and Sub² is independently selected from the group consisting of hydrocarbyl radicals having from 1 to 30 carbon atoms; silyl radicals, (substituted) amido radicals and (substituted) phosphido radicals, and wherein Sub¹ and Sub² may be linked with each other to form a ring system.

20 3. A process according to claim 1-2, wherein the inorganic base is a carboxylate, a fluoride, a hydroxide, a cyanide, an amide, a carbonate of Li, Na, K, Rb, Cs, or an ammonium salt or a group 2 metal salt chosen from Mg, Ca, or Ba thereof, an alkali metal chosen from Li, Na, K, Rb, or Cs of phosphate or a phosphate ester and related aryl and alkyl compounds) or their alkoxides and phenoxides, thallium hydroxide, alkylammonium hydroxides or fluorides, a
25 hydrocarbanion of group 1, group 2, group 12 or group 13 elements, or alkali

metals, group 1 hydrides or group 2 hydrides or carbonates of Li, Na, K, Rb, Cs

4. A process according to claim 3, wherein the inorganic base is selected from sodium hydride, or calciumhydride.
- 5 5. A process according to claim 1-2, wherein the metal-organic base is selected from organolithium compounds, or organomagnesium compounds,.
6. A process according to claim 1-5, wherein the reaction is carried out in an aprotic solvent.
7. A process according to claim 1-6, wherein the process is carried out in the
10 presence of a phase transfer reagent.
8. Process for the preparation of a polyolefin by making a metal-organic compound according to the process of claims 1 – 7, wherein the base is an olefin polymerisation compatible base, which metal-organic compound is activated anywhere in, or before a polymerisation reactor.
- 15 9. Process according to claim 8, wherein the metal-organic compound is formed used without purification.
10. Process according to claim 8 or 9, wherein the metal-organic compound is formed in the polymerisation equipment.